

 INSTRUMENTS  
VICTOR GAMA





## UM ESPAÇO DE EXPERIMENTAÇÃO E CRIAÇÃO LIVRE ABERTO AO VISITANTE.

INSTRMNTS é uma série de instrumentos musicais de nova geração criados pelo compositor Victor Gama e desenvolvidos pela PangeiArt. Nos últimos vinte anos, temos colaborado de perto com fundações, museus, centros culturais e festivais para instalar exposições interativas com workshops e apresentações ao vivo que cumprem programas educacionais e de entretenimento e envolvem o público no processo de criação musical.

A exposição é um espaço de experimentação livre, onde os visitantes são convidados a tocar os instrumentos. Projeções de vídeo e dispositivos interativos e multimídia ilustram a origem e execução de cada um dos instrumentos. Concertos, oficinas, demonstrações e aplicativos no espaço expositivo proporcionam um programa inovador e dinâmico de atividades para todos os visitantes.

## A SPACE OF FREE EXPERIMENTATION AND PERFORMANCE FOR THE VISITOR

INSTRMNTS is a series of next generation musical instruments created by composer Victor Gama and developed by PangeiArt. In the last twenty years we've been closely collaborating with foundations, museums, cultural centers and festivals to install interactive exhibitions with workshops and live performances fulfilling educational and entertaining programs and engaging audiences.

The exhibition is a space of free experimentation where the visitors are invited to touch and play the instruments on display. Video projections and multimedia touch sensitive interactives illustrate how they are played and their origins. Performances, workshops, demonstrations and applications in the exhibition space deliver an innovative and dynamic program of activities for all visitors.



## TIPAW

Construído sob encomenda do Museu Nacional da Escócia, o desenho deste instrumento inspirou-se na história da fuga de um tigre do Zoo de Edimburgo que se havia refugiado naquele museu.

Commissioned by the National Museums of Scotland for the Performance and Lives Gallery, Tipaw's design was inspired by rumors of a tiger that had gone on the run from Edinburgh Zoo and found refuge inside the museum.

O processo de desenho e construção inicia-se no domínio digital e termina num objecto físico. Como consequência cada instrumento transporta consigo o seu correspondente virtual.



The process of design and construction of these instruments start digital and end with a physical object. As such, each instrument has a digital counterpart.

Esta característica permite-nos desenvolver e usar bibliotecas de som exclusivas a estes instrumentos.

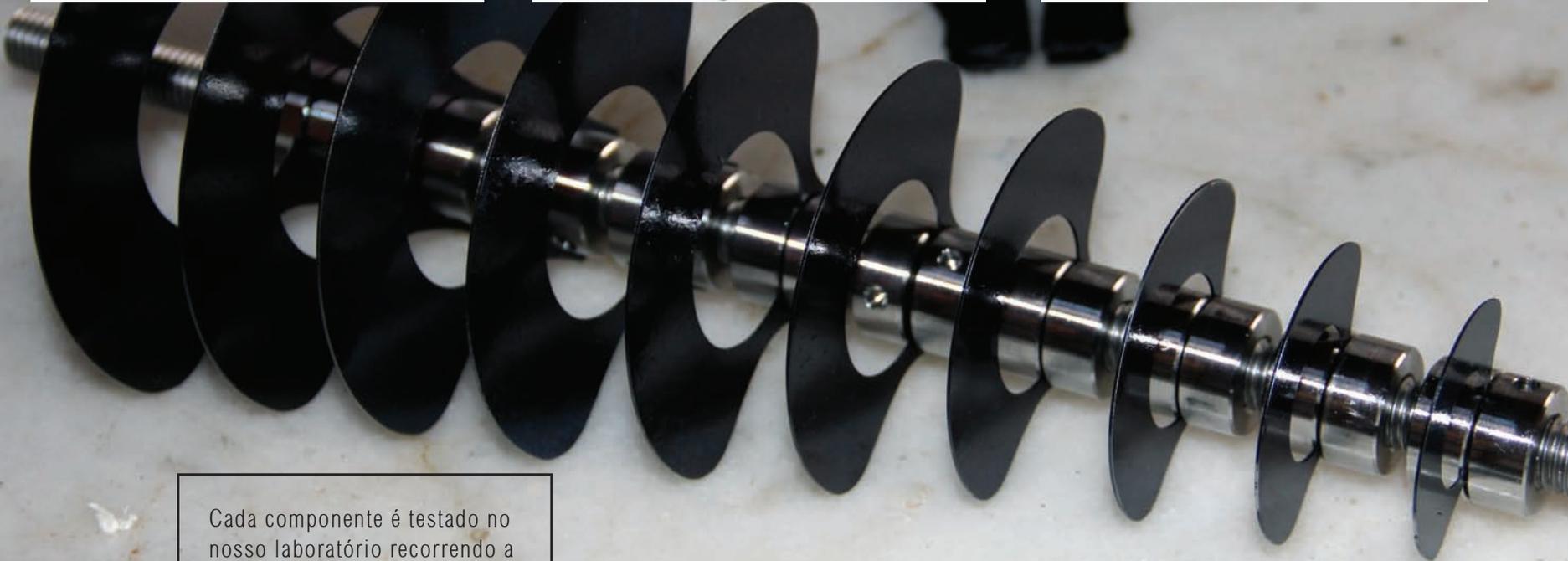
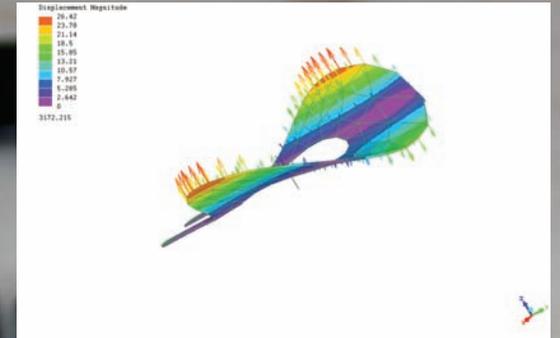
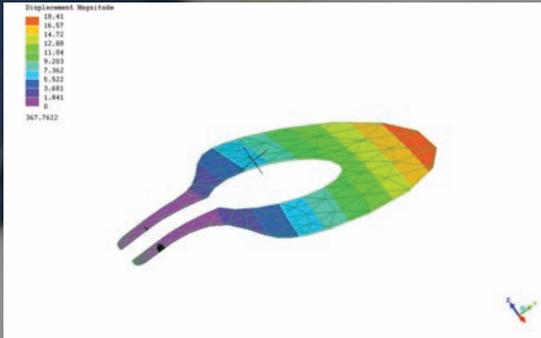
This feature allows us to develop and play with their unique sound libraries.



Os instrumentos musicais  
são objectos complexos.  
Não só o seu desenho  
necessita de evoluir.



Musical instruments  
are complex objects.  
It's not just the design  
that needs to evolve.



Cada componente é testado no nosso laboratório recorrendo a tecnologias de ponta.

Each component is tested and engineered in our lab using the most advanced technologies.



# ACRUX

O Acrux deu origem a uma família de instrumentos que cobre uma extensa gama de sons e possibilidades performativas.

From the Acrux, a new family of instruments has evolved which cover an extensive range of sounds and performance possibilities.



# DO VIRTUAL AO FÍSICO

INSTRMNTS da série Pangeia Instrumentos são instrumentos musicais contemporâneos, dispositivos sonoros e instalações desenhados e construídos através de um processo de experimentação com o design, som, música, imagem e performance.

A vocação destes Instrumentos é a de criar e executar nova música com um objecto capaz de emergir tanto do mundo virtual como do mundo físico.

Victor Gama trabalha com o fenómeno de metamorfose dos instrumentos musicais, particularmente os tradicionais de Angola, investigando a sua evolução desde períodos tão distantes como a pré-história até aos dias de hoje. Este fenómeno sugere que a forma é um elemento dinâmico no processo de composição e permite estabelecer continuidades entre a tradição e a contemporaneidade.

Anya Ventura, MIT

Mais informação sobre o trabalho de Victor Gama:  
[More information about Victor Gama's work:](http://www.victorgama.org)  
[www.victorgama.org](http://www.victorgama.org)

# FROM THE VIRTUAL TO THE PHYSICAL

INSTRMNTS from the Pangeia Instrumentos series are contemporary musical instruments, sound devices and installations designed and built as a process of music writing and experimentation with form, design, sound and music.

Its creator, composer, artist and electronics engineer Victor Gama has been steadily designing and building an impressive array of instruments since the early 90s. His process begins with the creation of an entirely new instrument, one whose design is steeped in symbolic meaning. Concept design, the selection of materials, fabrication, and scoring is all part of the rigorous way Gama creates new music for the 21st century, blending current fabrication technologies with ideas, materials, and traditions inspired by the natural world.

Anya Ventura, MIT

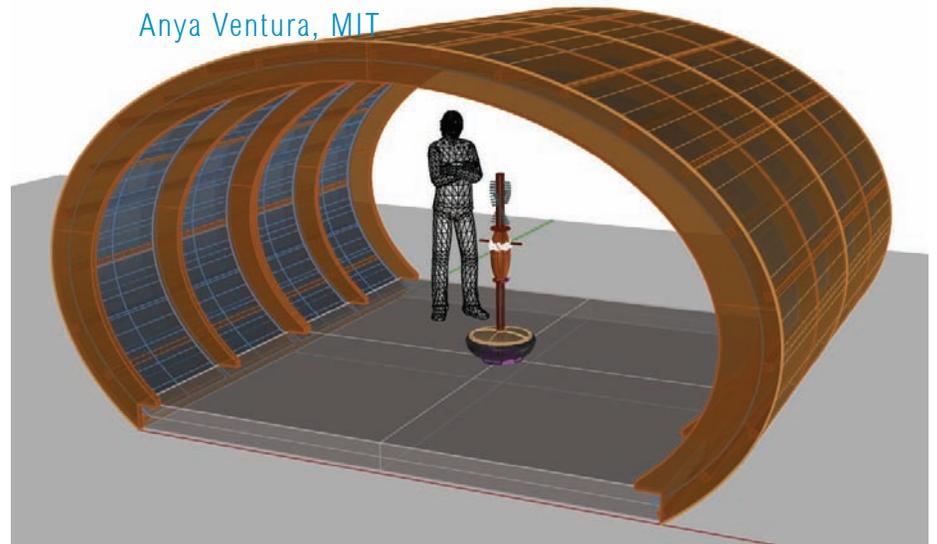


Imagem de Richard Termine



Kronos Quartet estrearam Rio Cunene no Carnegie Hall em Nova Iorque, uma peça que Gama escreveu em exclusivo para aquele quarteto, os instrumentos Acrux e Toha e instrumentos construídos por crianças do Xangongo, Cunene, Angola.

The Kronos Quartet premiered Rio Cunene at Carnegie Hall in New York, a composition written by Gama exclusively for this quartet, his instruments Toha and Acrux, and instruments built by children from Xangongo, Cunene province, Angola.

# TOHA

Duas harpas diatônicas de 22 cordas cada num só instrumento com dois ressoadores. Desenho inspirado no ninho do tecelão sociável que habita as regiões desérticas do Namibe e Kalahari.



Two 22 string diatonic harps in a single instrument with two resonators. The Toha's design was inspired by the nests of the sociable weaver birds that inhabit the desert regions of Namibe and Kalahari.



INSTRMNTS na colecção do National  
Museums of Scotland em Edimburgo.

INSTRMNTS in the collection of the National  
Museums of Scotland in Edinburgh.



participantes indican el  
juego tocando las teclas haciendo  
alternativamente una pregunta y una  
respuesta hasta que consigan  
mantener un diálogo rítmico tocando  
los dos simultáneamente

video de la mesa de diálogo rítmico  
por Antonio Tamarit y Víctor Benito

visite-nos em  
visit us at  
[www.instrmnts.com](http://www.instrmnts.com)



Fundación Carlos De Amberes, Madrid

A woman with long dark hair, wearing a red and black patterned strapless top, is kneeling and playing a traditional stringed instrument. A young girl with blonde hair, wearing a blue and white checkered top, is sitting next to her, looking intently at the instrument. The instrument has a large, rounded, light-colored body and a long, thin neck. The background shows other people and a wooden floor, suggesting an exhibition or workshop setting.

A exposição INSTRMNTS inclui um programa de actividades com concertos, oficinas, jogos, aplicativos interativos e palestras para todos os grupos etários.

The INSTRMNTS exhibition includes a program of activities, including concerts, talks, games, interactive apps and workshops for all age groups.

...punch Lyraa, combining geometries related to the orbits of planets or stars.

Follow this project on twitter at [twitter.com/victorgama](https://twitter.com/victorgama)



'a mais impressionante combinação de som, visão e concepção de todo o festival foi INSTRUMENTOS, uma exposição e performance de Victor Gama na imponente Royal Opera House... cada instrumento é um objecto magnífico; cada um sugerindo uma viagem audio-visual tanto étnica como high tech.'

'the event's most impressive and resonant mix of sound, vision and concept was INSTRUMENTOS, an exhibition/performance in the beautiful Paul Hamlyn Hall by Angola-born inventor and musician Victor Gama. Each instrument is a beautiful object; each implies a different audio-visual journey that's both ethnic and high tech.'

John L. Walters, The Guardian

# PAUL HAMLYN HALL

## ACRUX CONSTELLATION

As a new musical instrument Acrux draws its design from the Southern Cross constellation, visible only from the Southern Hemisphere. The tuning of this instrument is evolving towards a chromatic scale. The keys are played with the tip of the fingers or nails. The evolution and metamorphosis of musical instruments throughout history has influenced the development of the Pangeia Instrumentos series.

Listen to one of Datta's pieces for Acrux, "The Seeds of Silence" from the new laptop album.



More on [www.pangeia.com](http://www.pangeia.com)

### TIPAW

Text describing the TIPAW instrument.

Paul Hamlyn Hall, Royal Opera House, London



## Epsilon Lyrae

The design of this instrument has been inspired by a binary star system, a pair of stars orbiting with a common centre of gravity. The small constellation of Epsilon Lyrae can be seen from the Northern Hemisphere. Its brightest star, Vega, is about 26 light-years from the earth.

The instrument sits on the musician's lap while both hands are used to play the strings around the center of the cylindrical shaped soundboard. Both resonators are made of 'batedras' from Colombia, a type of gourd that grows on a tree and is almost perfectly spherical.



Uana is a multiplayer instrument that shows the continuity of the kissanje (thumb piano), an Angolan traditional instrument. The uana in the image was commissioned by the Clay Center for the Arts and Sciences in West Virginia, USA.

## UANA

Uana é um dos instrumentos contemporâneos que refletem a continuidade da tradição do kissanje, instrumento tradicional de Angola. O uana na imagem foi uma encomenda do Clay Center for the Arts and Sciences, West Virginia, EUA.

# VELA 6911

Uma composição escrita por Victor Gama para toha, acrux, dino e instrumentos de orquestra foi uma encomenda da Orquestra Sinfônica de Chicago para o ciclo de concertos Music NOW com apoio da Fundação Calouste Gulbenkian.

A composition commissioned by the Chicago Symphony Orchestra Music NOW concert series, with support from the Calouste Gulbenkian Foundation, was written by Victor Gama for toha, acrux, dino and orchestral instruments.

Imagem de José Frade/Teatro S. Luiz